



Chapter 1 – Background and Planning Process

Background and History

Since its settlement as a trading post with local Cherokee tribes, the economic success and desirable way of life in the Greenville region has been tied directly to the access and mobility provided by the transportation system. The region's role as a textile and manufacturing hub for the South continues to diversify, which is evident in the Woodruff Road area with new developments attracting corporate headquarters as well as world-class education and research facilities.

Transportation in the Greenville Region

The region's modern transportation system evolved from primitive paths between farms and plantations — the locations of which often followed paths created by wildlife and first used by Native Americans. Transportation here took a step forward in the late 1700s when roads opened to link the new settlement at the falls of the Reedy River with towns such as Asheville, NC. The need to move freight to and from coastal ports was the driving force behind 19th century transportation initiatives, which included canal and road construction as well as railroad operations. Following the expansion of the region's transportation system after the Civil War, rail cars traveling through Greenville could connect to Atlanta, GA; Charlotte and Asheville, NC; Richmond, VA; and New Orleans, LA.

In the early 20th century, local leaders began to recognize the new-found popularity of the automobile. There were only five cars in the City of Greenville in 1904, but 10 years later that number already had increased to more than 1,000. By 1924, five of the 12 most traveled roads in the state were in Greenville County. Local and state leaders responded by constructing strategic roadways throughout South Carolina.

The federal government greatly expanded the construction of highways following WWII. The impact of the National Interstate and Highway Defense Act in 1956 was profound, altering travel patterns and shifting land development practices to automobile-focused suburban development. Interstate 85 created prime sites for industrial plants and textile mills. The opening of I-385 in the last few decades further expanded the regional and national roadway network.

Evolution of Woodruff Road

Woodruff Road began as a two-lane rural state road serving primarily residential traffic. In the late 1960s, the General Electric plant opened near the corridor, making turbines fired by natural gas. As textile plants and other industrial development followed, Woodruff Road continued to operate as a two-lane facility with moderate traffic. The 1978 opening of the Greenville Mall brought new traffic to the corridor and served as a catalyst for the transformation of the surrounding area from rural to suburban.

In the early 1980s, the extension of I-385 south of I-85 sparked another change, providing additional access to the region and generating more traffic in the vicinity of Woodruff Road. Not surprisingly, the improved access encouraged new residential development along the corridor. At this time, most of the corridor was zoned as either single-family or multi-family residential with commercial nodes at major intersections such as SC 14.

During this transition, most commercial development in the area occurred along Laurens Road, located west of Woodruff Road. Aside from the Greenville Mall and minor commercial development at the interchanges, Woodruff Road was envisioned primarily as a residential area with select industrial properties. However, as residential development continued, developers capitalized on the opportunity to provide shops and restaurants along the corridor. Despite the residential zoning, the corridor began to see commercial developments sprouting up as quickly as new neighborhoods.

In the late 1990s, the final step needed for conversion to a commercial corridor occurred when General Electric sold land adjacent to I-385. Wal-Mart and Sam's Club opened in this location, and several other "big box" establishments followed suit by abandoning their previous location on Laurens Road to locate in the now-thriving Woodruff Road corridor. With the completion of developments such as the Shops at Greenridge and The Point, Woodruff Road was officially transformed from its rural beginning to a commercial hub for the region. What began as a two-lane rural road grew through a series of widening projects into a five-lane suburban thoroughfare.



Early road construction in Greenville County



Road construction on Woodruff Road in 2006

WOODRUFF ROAD CORRIDOR STUDY



Project Overview

The City of Greenville, working in conjunction with Greenville County and private sector project stakeholders, initiated the *Woodruff Road Corridor Study* to evaluate the transportation and mobility constraints along the corridor. The Woodruff Road corridor traverses one of the most congested commercial areas in the city, and as a result, traffic patterns are affected not only along the corridor, but also in the surrounding area. This area extends from Roper Mountain Road to the west, to South Carolina Highway 14 to the east, and Laurens Road to the south.

To solve the problems along Woodruff Road, addressing the problems at other locations throughout the study area would be necessary. These problems include congestion at interchanges along I-85 and I-385, connectivity between existing and proposed developments, alternative modes of transportation, and better governing of developments through access management and land use planning principles.

Planning Process

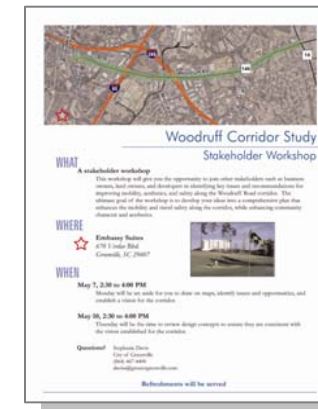
The involvement of local stakeholders was a critical component of the study's success and was accomplished through an interactive four-day design charrette. The *Woodruff Road Corridor Study* directly affects a number of existing and proposed developments including, but not limited to, the Shops at Greenridge, The Point, Crescent Center, International Center for Automotive Research, Millennium Campus, Verdae Development, and Carolina First.

During the charrette, input was gathered from representatives of these developments and many others, as well as City and County staff and South Carolina Department of Transportation (SCDOT) representatives. The charrette process resulted in a set of recommendations that City and County planning staff can utilize as a tool for implementing future improvements and land development within the Woodruff Road study area.

The design charrette took place May 7-10, 2007, with stakeholder input sessions held on the first and last day of the event. In between these two sessions, the project study team worked with City and County planning staff, molding the ideas of the stakeholders into a reasonable and feasible plan that could be used to implement improvements designed to reduce congestion and allow Woodruff Road to continue to thrive as a commercial hub.

Several overarching issues were addressed during the design charrette.

- **The resulting plan must enhance access and mobility.** Lack of access management leads to a struggle for mobility along the corridor. The current five-lane configuration along the corridor combined with the overabundance of driveway openings create undesirable levels of congestion.
- **Regional connectivity must be addressed.** The most successful tool for reducing congestion along the corridor will be the provision of alternate routes for through-moving traffic. Better connections through collector street planning and roadway improvements are vital.
- **Alternate modes of transport should be investigated.** Removing vehicular traffic by implementing improvements to both transit and bicycle- pedestrian mobility will directly affect both the corridor and the quality of life in the study area.
- **Connections to the Interstate should be evaluated.** Existing interchanges with I-85 and I-385 should be evaluated to determine if potential improvements might lessen the congestion along the corridor and/or increase safety at the location. Potential new interchanges should be evaluated for feasibility and resulting congestion relief.
- **Safety must be addressed.** Congestion levels along the corridor also directly affect the safety of vehicular and pedestrian activity. The recommendations of this plan must address vehicular and pedestrian safety issues along the corridor and the entire study area.
- **Changes to the corridor must be aesthetically pleasing.** Improvements to Woodruff Road should enhance — not detract from — the character of the surrounding community.
- **Plan recommendations must be functional and implementable.** Recommendations should be constructible and based on sound engineering principles. A plan based on sound engineering and planning can lead to easier implementation through phased improvements.



Early in the planning process, the project team worked with key stakeholders and local officials to develop a vision to guide the development of the Woodruff Road Corridor Study. The vision was supplemented by several broad goals intended to focus planning efforts on functional and viable solutions for the corridor.

Vision

“To create a healthy and sustainable environment that protects the access and mobility of the Woodruff Road area while utilizing smart growth principals, encouraging sustainable development, and protecting the community character.”

Goals

- Balance access and mobility in the corridor
- Address corridor safety concerns
- Identify potential aesthetic improvements
- Integrate with planned development
- Develop functional and implementable recommendations

WOODRUFF ROAD CORRIDOR STUDY



Day 1

The charrette kicked off May 7 with a stakeholder work session at the Embassy Suites on Verdae Boulevard. This event was designed to provide a project background to the stakeholders and then allow them to voice their concerns and ideas. Some of the issues and comments developed during this session are depicted on this page.

We can't really address our transportation issues unless we address connectivity.

CREATE "BEAUTIFUL" BOULEVARDS & BRIDGES

Synchronize Signals

Fix or modify Interchanges.

BETTER WAYFINDING NEEDED — "IT'S CONFUSING"

Provide better Choices for the traveling public

"It's time for a change"

Cross-access needed for bike and pedestrians

PROVIDE A "TOOLBOX" FOR PLANNING

ABANDONED RAIL LINE SHOULD BE USED AS TRANSPORTATION CORRIDOR

Shift work hours.

Need secondary road system to relieve Woodruff.



WOODRUFF ROAD CORRIDOR STUDY



Day 2

The second day of the design charrette focused on developing the recommendations of the stakeholders into feasible engineering and planning concepts. The issues evaluated included access management, interchange feasibility, regional connectivity, and transit improvements. Most concepts were only developed to a “trash-paper” conceptual level, allowing numerous ideas to be generated without allocating time to fine-tune the concepts.

A pin-up session was held at the Greenville County planning offices to enable the visiting stakeholders to weigh in on the proposed improvements. The “trash-paper” concepts were displayed, allowing the attendees to discuss the pros and cons of each proposed improvement. This feedback ensured that the proposed improvements were consistent with the vision of the community.

Day 3

The third day of the charrette was spent fine-tuning the proposed improvements, applying planning and design concepts to ensure each proposal was feasible and implementable. Another pin-up session allowed stakeholders to view the progress of the project team and propose final revisions to the plans before the concluding presentation.

Day 4

The fourth and final day focused on compiling the concepts and ideas into a concise plan that follows sound engineering and urban design principles, is functional, and is implementable. At the final stakeholder work session — which also was conducted at the Embassy Suites — exhibits with conceptual design plans, computer images, and hand renderings were displayed. Stakeholders viewed the displays and asked questions about the designs. A final presentation focused on the proposed improvements, including access management, regional connectivity, transit, and interchange design concepts. Following the presentation, a general question-and-answer session touched on several issues such as phasing and implementation plans, funding opportunities, and design feasibility.



• How to turn it into reality?
→ Funding
- local, state, PPP, CIP, guideshare
• How do we address the interchanges?
→ relocate?, SPU, phased improvements, collector-connectivity

• Who is the driving force?
→ Intergovernmental task force?
→ Must be multi-participatory
→ coord. to ID problems
• We need implementation

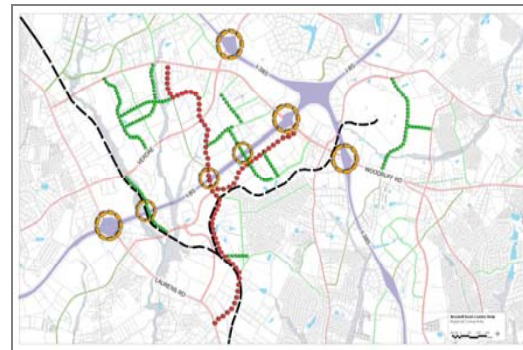


Report Organization

The organization of the *Woodruff Road Corridor Study* mirrors the exhibits presented at the second stakeholder work session. The chapters include:

Chapter 2 – Regional Context

The report begins by placing the Woodruff Road corridor into a regional context. Chapter 2 outlines the transportation planning framework, existing traffic congestion and traffic, and planned development. The chapter concludes with a discussion of existing and proposed regional connectivity for various modes.



Chapter 3 – Access Management Strategies

This chapter presents a toolbox of strategies specific to Woodruff Road that are used to balance the mobility of the roadway with the need to provide access to adjacent properties. These strategies are placed into the context of the Woodruff Road corridor through a series of illustrative maps.



Chapter 4 – Interchange Modifications

Chapter 4 begins with an overview of typical interchange configurations and design standards before exploring existing conditions at local interchanges. Near- and long-term recommendations for interchange improvements are provided.



Chapter 5 – Land Use Considerations

The inherent relationship between land use and transportation is discussed in this chapter. This relationship is placed into a local context with descriptions of area land uses and development patterns. A policy and guidelines toolbox, coupled with a series of land use recommendations, help provide a transition from the improvements presented in the first four chapters to the implementation strategies in Chapter 6.



Chapter 6 – Implementation

A prominent goal throughout the *Woodruff Road Corridor Study* planning process was to produce a set of functional and implementable recommendations. The report concludes by detailing specific implementation and funding strategies to ensure that the vision for Woodruff Road becomes a reality.

